PAPERS

Health status of the temporarily homeless population and residents of North West Thames region

Christina R Victor

Abstract

Objectives—To survey the health status of the temporarily homeless population of North West Thames region and make comparisons with regional residents.

Design—Direct interview with standardised questionnaires.

Setting—Temporarily homeless people resident in hotels in the London boroughs in the North West Thames region and a random sample of regional residents.

Subjects—137 hotels thought to be providing accommodation to homeless people selected at random from a list of 295. 113 (82%) participated in the study, and 319 (61%) of 522 homeless people approached participated. The study was restricted to adults aged 16 and over selected at random.

Results—The homeless population was predominantly female (195/319; 61%), young (229 (72%) aged 16-34), and poor, 54% (172/319) receiving income support. 207 subjects (65%) had dependent children aged 16 and under. Rates of acute illness among homeless people (32 cases; 10%) were similar to those reported by regional residents. The prevalence of longstanding limiting illness (108 cases; 34%) was similar to that for regional residents, but the prevalence of mental morbidity was twice that for the region as a whole (145 cases (45%) v 1485 (18%)). Utilisation of general practitioner services, accident and emergency departments, and inpatient admission was much higher by the homeless population than by regional residents. General practitioner registration rates were above 90% for the homeless sample.

Conclusions—Survey data provide empirical evidence about the nature and characteristics of the temporarily homeless population. The high service utilisation recorded may, in part, have resulted from the higher morbidity in this sample of homeless people. The concentration of homeless people into specific locations may suggest that additional funding should be provided to the district which provides care to this group. However, such funding should not necessarily be used for additional acute care but should be used to purchase appropriate services which meet the health needs of this very young, poor and vulnerable group.

Introduction

Homelessness is a term which encompasses a range of housing circumstances from the "hidden" homeless, which includes squatters or those living in overcrowded circumstances, to those who are without any form of shelter at all. The "official" homeless population consists of those who have been accepted as homeless by a local authority under the terms of the 1985 Housing Act. This means they have a local connection with the area where they are applying, have not made

themselves "intentionally" homeless, and usually are in "priority need." A person or family is in priority need if (a) there is a dependent child, usually under the age of 16; (b) the person or a partner is pregnant; or (c) the person or family is "vulnerable" because of old age, mental illness or handicap, physical disability, or "other special reasons" or is homeless because of an emergency such as flood or fire.

Over the past decade there has been a large increase in the number of households in England accepted as officially homeless, from 53 110 in 1978 to 145 800 in 1990.[1] The number of families in London accepted as homeless under the terms of the 1985 Housing Act increased from 14 430 to 37 240 over the same period. This increase in the number of households accepted as homeless took place at the same time as a dramatic decrease in the local authority housing stock. The sale of local authority properties to tenants combined with restrictions on local authority expenditure has reduced the stock of dwellings available to house the homeless. Consequently local authorities have had to place households in temporary accommodation such as hostels and bed and breakfast hotels while they await permanent rehousing. In March 1991 there were 37 971 households in temporary accommodation in London as compared with 14 049 in September 1986.

Homelessness is not simply a housing problem. It also has profound health implications. As the government moves to funding regional and district health authorities on a strict weighted capitation basis the extra resource implications of certain population groups are becoming more pressing, especially when these groups are heavily concentrated in specific areas. One striking example is the case of homeless people in London. I have examined two main aspects of homelessness and its relation to health—namely health service utilisation and health status.

Housing conditions influence people's physical and mental health, although exact quantification of this relation is difficult because of pervasive methodological problems. Homeless people experience the most extreme form of housing problems and, because of their economic and social circumstances, may make heavy demands on health and social services. Two studies have reported high rates of hospital use among homeless people in two inner London health districts.[2 3] At St Mary's Hospital in Paddington 9% of all acute unplanned admissions were accounted for by people living in temporary bed and breakfast accommodation, while in Bloomsbury homeless people (predominantly those of no fixed abode) accounted for 8·7% of all admissions. These levels of utilisation imply a significant additional cost to the hospitals concerned in providing care.

Although there are many speculations and suppositions about the health status of homeless people living in bed and breakfast hotels, most of these data are derived from small scale anecdotal surveys or relate

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to service utilisation. There have been few surveys which have attempted to compare the health of homeless and non-homeless populations by means of a standardised survey instrument. This paper presents the results of a health and lifestyle survey in the North West Thames Regional Health Authority area which included the resident population and temporarily homeless people living in bed and breakfast hotels in the London boroughs within the region. Four topics are covered: the sociodemographic characteristics of temporarily homeless people, health status, health behaviour, and service utilisation. Comparisons are drawn between the characteristics of homeless people and residents of Parkside District Health Authority—the area with the largest concentration of homeless people living in bed and breakfast accommodation and one of the most deprived of all health districts—and also the regional residents.

Method

The sampling procedure differed for the two surveys. For the regional health survey all 514 wards in the North West Thames region were stratified into four categories based on their underprivileged area/Jarman 8 score. Six hundred and twenty two enumeration districts within the region were selected for the survey. Within each enumeration district 24 postcode file delivery points were selected. Once an address was selected it was established that the delivery point was a residential unit and the household contacted. All adults aged 16 and over resident in the household were listed and one member selected at random for interview.

For the homeless survey a comprehensive list of 295 hotels in the nine London boroughs within the North West Thames region was obtained. These hotels were stratified into seven categories on the basis of the number of rooms and 137 selected at random. The number of interviews to be achieved was also related to the size of the hotels. For example, from among six

category A hotels four were selected and 10 rooms in each selected for interviews. The subjects for interview were also selected at random. At each hotel rooms occupied by homeless families were listed and the required number selected by using a random numbers table. Within rooms all subjects aged 16 and over were listed and a study respondent selected at random.

The survey instrument was administered by a team of trained interviewers from social and community planning research. The survey covered six main topics: physical health, mental health, accidents, health behaviour—for example, smoking, alcohol consumption, etc—service utilisation, and satisfaction with services used. Additional questions about housing history were included. The regional survey was undertaken during 1989 and 1990. The homeless survey took place in spring 1991.

Results

SURVEY RESPONSE

The survey response in the homeless study may be considered by hotel and by individuals (table I). Of the 137 hotels selected for the study, 113 (82%) participated. Of the 24 that declined, 12 claimed that there were no homeless families present and 12 refused or could not be contacted. If all 137 hotels had participated then the target study population would have been 674 (table I). A total of 152 potential interviews were lost because of hotel refusals (n=72) or because there were no homeless families present (n=80). Consequently 522 subjects were actually contacted and 319 (61%) participated.

Most of the 319 interviews were conducted with homeless people resident in hotels in Ealing (47), Kensington and Chelsea (42), Westminster (81), and Brent (75). The latter London borough is in Parkside Health Authority area, as are parts of Kensington and Chelsea and Westminster. Probably most of the hotels were actually sited in Parkside, which has the largest concentration of temporary accommodation in London.

CHARACTERISTICS OF "HOMELESS" POPULATION

Of the 319 homeless people interviewed, 195 (61%) were female (table II). The homeless population consisted predominantly of young people: 229 (72%) were aged 16-34, and seven (2%) were over 65. The average age of the homeless population was 31 years. This contrasted sharply with the Parkside and regional samples, where 17·5% (97/544) and 22% (1815/8251), respectively of subjects interviewed were aged 65 or over.

Although only 122 (38%) homeless people were married or living as married, 251 (79%) had dependent children. The number of dependent children ranged from one to seven, most parents having a single child of preschool age.

The homeless population was classified into ethnic groups by the respondents themselves. One hundred

TABLE I—*Homeless families survey: response rate*

	No
Hotel response	
Total hotels selected for sample	137 (100%)
Less:	
Out of scope (no homeless families at time of survey)	12
Refused/non-contact	12
Total hotels with potential interviews	113 (82%)
Individual response	
Total individuals to be selected	674
Less out of scope (not enough homeless families in hotel for required number of selections) 80	
Total potential interviews	594 [100%]
Less hotel refusals 72	
Total individual selections	522 (100%)
Less:	
No contact at selected room after ≥4 calls	78
Refused/other unproductive—for example, ill, no English, etc	125
Total interviews	319 [54%] (61%)

TABLE II—*Sociodemographic characteristics of homeless population*

	Homeless		Parkside		North West Thames Regional Health Authority	
	No	%	No	%	No	%
Female	195	61	285	51	4583	56
Aged 16-34	229	72	183	33	2596	31
Married/living as married	122	38	291	53	4811	58
Describing self as white	131	41	348	63	7016	85
With dependent children	207	65	154	28	2314	28
Living alone	86	27	132	24	1931	23
Employed (full or part time)	48	15	299	54	3962	48
Receiving income support	172	54	50	9	300	4
Total	319	100	554	100	8251	100

Time (months)	No	%
<1	86	27
1-	86	27
3-	74	23
6-	57	18
≥12	16	5
Total	319	100

TABLE IV—*Homelessness survey: previous type of accommodation*

	No	%
Hotel	45	14
Permanent dwelling	189	59
Room—not self contained	62	19
Mobile home	3	1
Other	18	6
Not known	2	1
Total	319	100

TABLE V—*Homelessness survey: previous type of tenure**

	No	%
Home owner	30	11
Local authority rented	66	24
Housing association rented	8	3
Private rented	76	28
Squatter	60	22
Other	30	11
Not known	2	1
Total	272	100

*Question not asked of hotel dwellers and those whose previous accommodation type was unknown.

and thirty one (41%) described themselves as white compared with 63% (348/554) of subjects in the Parkside sample and 85% (7016/8251) in the regional sample. Of subjects who identified themselves as belonging to an ethnic minority group, a large proportion (44% (140/319) in the homeless sample and 38% (211/554) in the Parkside sample) did not speak English at home as their first language.

At the time of interview 48 (15%) homeless people were gainfully employed compared with 299 (54%) Parkside residents. Overall 54% of the homeless sample (172/319) and 9% of Parkside residents (50/554) were in receipt of income support.

Homeless respondents were asked several additional questions about their housing history. At the time of interview 246 (77%) had been resident in their hotel for six months or less; only 16 (5%) had been living in their hotel for over 12 months (table III). Before moving to their hotel 45 homeless respondents (14%) had previously been resident in another hotel. The rest had formerly lived in accommodation of varying degrees of permanency and legitimacy (table IV). Sixty of 272 subjects (22%) had previously been living as squatters and 30 (11%) had been home owners (table V). Breakdown of relationships, overcrowding, and financial problems were the main reasons for the sample becoming homeless (table VI).

HEALTH STATUS

Acute illness was measured with a question asking subjects if they had had to cut down in the past 14 days on the things they usually did because of illness or injury. Ten per cent of the homeless sample (32 subjects) reported an acute episode of ill health. Similar overall prevalences of acute illness were observed for Parkside and regional residents (table VII).

Overall 147 (46%) homeless people reported they had a long term illness or had had a disability for over a year (table VII). The prevalence of this indicator of long term health problems was raised in the homeless sample as compared with residents of Parkside. However, when the definition of chronic illness was restricted to problems which limit daily activity (longstanding limiting illness), then the difference between the samples disappeared.

Given that the prevalence of longstanding limiting illness increases with age, then comparison of the

TABLE VI—*Homelessness survey: reasons for leaving previous accommodation*

	No	%
Overcrowded	69	22
Domestic dispute	59	18
Financial problems	19	6
Financial difficulties with landlord	11	3
Other problems with landlord	54	17
Accommodation in poor condition	11	3
Accommodation only temporary	5	2
Moved from abroad	8	3
Transferred by local authority	20	6
Other	63	20
Total	319	100

prevalence of this indicator among our samples is problematical with the variations in age structures noted above. Standardisation of rates was undertaken by the indirect method using the North West Thames region as the standard population. This procedure gave a standardised limited illness ratio of 109 for Parkside and 253 for the homeless sample as compared with 100 for the regional sample overall.

Mental health status was measured with the 12 item general health questionnaire. Overall 20% of Parkside residents (111/554) showed significant mental morbidity as measured by a score of ≥3 as compared with 45% of homeless respondents (145/319) and 18% (1485/8251) for the region as a whole.

HEALTH BEHAVIOUR

The survey gathered extensive data on the lifestyle of those interviewed. Topics covered included diet, exercise, smoking, alcohol consumption, and, for women, preventive health behaviours (table VIII).

Rates of smoking were higher among homeless people than among Parkside residents. Overall 41% of homeless people (131/319) were current smokers compared with 31% of Parkside residents (172/554) and 29% of regional residents (2428/8251) (table VIII). Alcohol consumption on a regular or occasional basis was reported by 179 (56%) homeless people, 393 (71%) Parkside residents, and 7043 (85%) regional residents. The homeless sample was also less likely to have participated in exercise. Women aged 20-65 were asked if they had had a cervical smear in the past five years. For all populations rates of smear uptake were low.

HEALTH SERVICE UTILISATION

Respondents were asked if they had used certain health services ranging from primary care to hospital inpatient admission. Rates of community service utilisation were high among homeless people, especially contacts with a general practitioner and health visitor (table IX). Overall 92% of homeless people (293/319) were registered with a general practitioner; 44% of them, however, had registered within the past year. Homeless people were more likely to live some distance from the surgery: 57 (18%) lived 8 km or more from the surgery compared with 17 (3%) of the Parkside residents and 413 (5%) of the regional residents.

Homeless people were more likely to have visited a casualty department in the previous 12 months or to have had an inpatient admission in the previous year. There were no differences in the use of outpatient departments.

Discussion

Homelessness is a social policy issue which has assumed increased prominence and importance over the past decade. There has been a dramatic increase in the numbers of people without any form of shelter, in addition to the well documented increases in numbers of people accepted as being legally homeless under the 1985 Housing Act. Clearly a chief priority is to address the reduction in the available supply of affordable housing.

TABLE VII—*Homelessness survey: prevalence of health problems*

	Homeless		Parkside		North West Thames Regional Health Authority	
	No	%	No	%	No	%
Acute health problems in previous 14 days	32	10	44	8	743	9
Health problem for one year or more	147	46	216	39	3960	48
Health problem limiting daily activity for one year or more	108	34	177	32	2723	33
Mental morbidity general health questionnaire score ≥3	145	45	111	20	1485	18
Total	319	100	554	100	8251	100

TABLE VIII — *Homelessness survey: lifestyle factors*

	Homeless		Parkside		North West Thames Regional Health Authority	
	No	%	No	%	No	%
Current regular smoker	131	41	172	31	2428	29
Regular or occasional consumption of alcohol	179	56	393	71	7043	85
Exercise in previous 14 days	115	36	233	42	4020	49
Blood pressure checked in past year	204	64	315	57	4797	58
Cervical smear test in past five years (women aged 20-64)	207	65	410	74	2819	34
Overweight/obese*	95	30	188	34	2995	36
Total	319	100	554	100	8251	100

*Overweight/obesity based on body mass index.

TABLE IX — *Service utilisation*

	Homeless		Parkside		North West Thames Regional Health Authority	
	No	%	No	%	No	%
Consulted general practitioner in previous 14 days	93	29	89	16	1568	19
Seen health visitor in previous 14 days	13	4	5	1	82	1
Visited casualty department in previous 14 days	42	13	17	3	412	5
Visited outpatient department in previous three months	38	12	66	12	1073	13
Hospital inpatient in previous 12 months (excluding obstetrics)	42	13	55	10	742	9
Visited NHS dentist in previous 14 days	19	6	44	8	577	7
Total	319	100	554	100	8251	100

Homelessness has a wide social impact. We know that homeless people are concentrated into specific geographic localities within London and other major urban areas. They are often heavy users of services within these localities. Therefore, there is an important role for district health authorities in assessing the health needs of this population group. However, greatly improved information about the health needs and characteristics of the homeless population is required if district health authorities are to successfully accomplish this task.[4]

The homeless population is often referred to as a single homogeneous social group. Clearly there are important distinctions between the different categories of homeless people, which will have an impact on their health needs. This paper concentrates on considering the health status of the "official" homeless population, who are housed on a temporary basis in hotels before being permanently rehoused. It is not therefore possible to extrapolate the findings to the general population of homeless people.

Enumerating the health needs and status of homeless people in bed and breakfast accommodation has attracted only limited interest, perhaps because this group is much less visible than street dwellers. My survey data indicate that the population of homeless people housed in temporary bed and breakfast hotels is extremely young and characterised by a large proportion of families with young children. This is not surprising, given the specific legal requirements that must be satisfied in order to be accepted as legally homeless. However, from a health authority perspective the large number of young families included within this population obviously has implications for the purchasing of appropriate services. The demographic characteristics of this population indicate a need for obstetric, family planning, and children's services.

The kinds of services required by homeless people are affected by their ethnic characteristics. The vast majority of homeless people interviewed were drawn from minority communities, most notably from Africa, the Asian subcontinent, and the West Indies. This overrepresentation of minority communities among homeless people implies a need for culturally aware and specific services. This is reinforced by the very large proportion of the population who did not speak English at home. However, it was not always appropriate to differentiate the needs of homeless people from local residents of Parkside. The survey also drew attention to the large number of Parkside residents whose first language was not English.

HOUSING HISTORIES AND OTHER FACTORS

Little good information is available on the housing histories of homeless people. However, from a health planning perspective there is a clear need for data about how long temporarily homeless people remain within a particular district health authority before being permanently rehoused. This survey indicated that the vast majority of those interviewed had been resident in their hotel for six months or less and that they had previously lived in "ordinary" housing. This implies that the temporarily homeless population is fairly mobile and that only a minority of members are required to stay in hotels for any length of time. Again the implied high turnover of this population has implications for the style and type of services appropriate for such homeless people. Also we must not forget the minority who are resident in temporary accommodation for one year or longer.

A final sociodemographic factor that has a bearing on health needs is socioeconomic status. Most of the homeless people were not working and were dependent on state benefit. The high proportion receiving income support illustrates the high prevalence of poverty in this population. Clearly this limits scope for a more healthy but possibly more expensive lifestyle.

The survey collected data about two aspects of physical health status: acute and chronic or long term disability. Roughly 10% of all samples reported an acute illness in the 14 days before interview. By contrast, 14% of a national population sample reported an acute illness in the previous 14 days.[5] The crude prevalences of chronic ill health were similar among the populations surveyed. However, standardisation of these rates to take into account the differing structure of the populations emphasised the much higher prevalence of chronic ill health in the homeless sample. It is difficult to draw direct comparisons with national data from the general household survey because of the different questions used. In 1990, 34% of the population of Great Britain reported a long term disability or health problem.

There is obviously a considerable role for health promotion activities in this population, especially with reference to smoking and encouraging women to have regular cervical smear tests. However, such health promotion activities must take cognisance of the deprived environment in which the temporarily homeless population lives.

Rates of service utilisation were generally high in the homeless population. General practitioner consultation rates in the 14 days before interview (29% of the sample (93/319)) were almost twice that (16%) found in a national sample by the general household survey.[5] Hospital inpatient utilisation was 12% per annum as compared with 9% nationally.[5] Almost all of the homeless population were registered with general practitioners. However, in many cases the general practitioner was some distance away, probably in their district of origin. In part the high rates of general practitioner registration may reflect the influence of special primary care services for homeless people in Bayswater. There has been considerable debate on whether the high rates of hospital service utilisation by homeless people reflect increased morbidity or lack of access to other services. Our data suggest that, in part, higher morbidity may be a cause of increased service use. However, the high rates of casualty department use may also indicate problems among the homeless population in gaining access to appropriate primary care.

The preliminary results of this survey provide general insight into the nature and characteristics of the temporarily homeless population, which have implications for the planning and provision of health care. Firstly, the population is poor, young, and drawn from minority communities and consists predominantly of parents with preschool age children. Clearly this has implications for the provision of paediatric, obstetric, and family planning services in areas that contain a concentration of this population group. Secondly, service utilisation rates are high in this group and may well reflect these increased rates of chronic morbidity. Additional funding may be merited by those areas that contain concentrations of this population group to take into account their additional health demands. However, if additional funding is made available to districts to provide care for this group, then it is important that such funds should be used not simply to buy additional acute care but to provide appropriate services. Further analysis of this and other surveys will help identify the most appropriate types and styles of services for homeless people.

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Antenatal maternal serum screening for Down's syndrome: results of a demonstration project

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Abstract

Objectives—To assess the implementation of antenatal screening for Down's syndrome in practice, using individual risk estimates based on maternal age and the three serum markers: α fetoprotein, unconjugated oestriol, and human chorionic gonadotrophin.

Design—Demonstration project of Down's syndrome screening; women with a risk estimate at term of 1 in 250 or greater were classified as "screen positive" and offered diagnostic amniocentesis.

Setting—Hospital and community antenatal clinics in four health districts in London.

Subjects—12 603 women of all ages with singleton pregnancies seen between February 1989 and the end of May 1991, with follow up of the outcome of pregnancy completed to the end of 1991.

Main outcome measures—Uptake of screening, detection rate for Down's syndrome, false positive rate, odds of being affected given a positive result, and uptake of amniocentesis in women with positive screening results, together with the costs of the screening programme.

Results—The uptake of screening was 74%. The detection rate was 48% (12/25), and the false positive rate was 4·1%, consistent with results expected from previous work based on observational studies. There was a loss of detection due to the selective use of ultrasound scans among women with positive screening results. One affected pregnancy occurred among 205 reclassified as negative; this illustrated the danger of false negatives occurring in this group and lends weight to the view that if an ultrasound estimate of gestational age is used it should be carried out routinely on all women rather than selectively among those with positive results. The estimated cost of avoiding the birth of a baby with Down's syndrome was about £38 000, substantially less than the lifetime costs of care.

Conclusion—Antenatal maternal serum screening for Down's syndrome is effective in practice and can be readily integrated into routine antenatal care. It is cost effective and performs better than selection for amniocentesis on the basis of maternal age alone.

Introduction

In 1988, in a study using stored maternal serum samples from pregnancies with and without Down's syndrome fetuses we estimated that antenatal screening for Down's syndrome based on maternal age and the measurement of α fetoprotein, unconjugated oestriol, and human chorionic gonadotrophin in maternal blood would detect 61% of affected pregnancies with a 5% false positive rate. This means that about 5% of women screened would be offered a diagnostic amniocentesis.[1] The estimated detection rate has since been revised from 61% to 58%.[2] In 1989 we set up a screening programme in our local health district, later extending the service to three neighbouring health districts. This